

Office of Solid Waste



Environmental Fact Sheet

MODIFICATIONS PROPOSED FOR WOOD PRESERVING REGULATIONS

The Environmental Protection Agency (EPA) has issued a notice of proposed rulemaking that would modify several aspects of a rule that regulates wastes from the wood preserving industry under the Resource Conservation and Recovery Act (RCRA). EPA is requesting comments on the proposed modifications.

Background

On December 6, 1990, EPA published in the *Federal Register* a final rule listing three categories of wood preserving wastes as "hazardous." The rule subjected the management of these wastes to regulation under RCRA and established standards for managing hazardous wastes on "drip pads," a containment and collection system commonly used in the wood preserving industry.

Following promulgation of the December 1990 rule, EPA and industry representatives identified problems with implementing and interpreting the regulations. As a result, EPA agreed to extend the compliance dates for the drip pad management standards and to propose certain modifications to the rule. On June 5, 1991, the EPA Administrator signed an administrative stay that addressed most of the elements of the final rule now being proposed for modification.

Action

EPA is proposing to revise the wood preserving rule to develop more practical drip pad management and design standards, while maintaining the environmental protectiveness of the rule. This notice will provide an opportunity for public comment on the issues raised in the

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June 1991 administrative stay and on other implementation problems involved with the wood preserving rule. EPA's proposed revisions include:

- narrowing the scope of the wastewater listings to those wastewaters that come in contact with process contaminants,
- eliminating the F032 designation for past users of chlorophenolic formulations if F034, F035, or Toxicity Characteristic wastes are currently being generated,
- revising the drip pad cleaning requirements to require cleaning as needed to facilitate weekly inspections,
- adding requirements that drip pad surface materials be chemically resistant and be maintained to prevent deterioration,
- revising the new drip pad standards to require leak collection systems,
- removing the requirement that new drip pads be "impermeable,"
- replacing the requirement that existing drip pads be "impermeable" with a requirement that they meet a numerical permeability standard,
- revising the schedule for upgrading existing drip pads to allow 15 years for incorporating liners and leak detection systems rather than a schedule based on the age of the drip pad, and
- requiring the cleanup of storage yard "drippage" and contingency plans for such cleanup.

Public Comment

EPA is requesting public comment on this proposed rule. Comments should be submitted to EPA within 30 days of the publication of the *Federal Register* notice announcing this action. For instructions on submitting written comments, please see the *Federal Register* notice. It is available at no charge by calling the RCRA Hotline or by going to EPA's RCRA Information Center in Washington, D.C.

Contact

For further information, or to order a copy of the *Federal Register* notice, please call the RCRA Hotline Monday through Friday, 8:30 a.m. to 7:30 p.m., EST. The national toll-free number is (800) 424-9346; for the hearing impaired, it is (TDD) (800) 553-7672. In Washington, D.C., the number is (703) 920-9810 or TDD(703) 486-3323. Or write to: RCRA Information Center, Office of Solid Waste (OS-305), U.S. EPA, 401 M Street, S.W., Washington, D.C. 20460. Information is also available from the Small Business Ombudsman Hotline. The national toll-free number is (800) 368-5888.

U.S. ENVIRONMENTAL PROTECTION AGENCY

40 CFR Parts 261, 264, 265, and 302

WOOD PRESERVING;

[FRL-]

IDENTIFICATION AND LISTING OF HAZARDOUS WASTE; STANDARDS FOR OWNERS AND OPERATORS OF HAZARDOUS WASTE TREATMENT, STORAGE, AND DISPOSAL FACILITIES; INTERIM STATUS STANDARDS FOR OWNERS AND OPERATORS OF HAZARDOUS WASTE TREATMENT, STORAGE, AND DISPOSAL FACILITIES; AND CERCLA DESIGNATION, REPORTABLE QUANTITIES.

AGENCY: U.S. Environmental Protection Agency

ACTION: Notice of Proposed Rulemaking and Request for Comments

SUMMARY: The U.S. Environmental Protection Agency (EPA) today is proposing to amend the regulations for hazardous waste management under the Resource Conservation and Recovery Act (RCRA) by modifying Subpart W standards for drip pads and modifying the listings of F032, F034, and F035. Today's notice proposes to modify portions of the regulations that were finalized by EPA on November 15, 1990 (55 FR 50449 on December 6, 1990) and administratively stayed on June 5, 1991 (56 FR 27332 on June 13, 1991). Final action on these issues will result in the removal of the June 5, 1991 administrative stay of these elements. This notice also proposes to modify the Comprehensive Environmental

Response, Compensation, and Liability Act (CERCLA) list of hazardous substances to reflect the proposed modifications of the F032, F034, and F035 hazardous waste listings.

DATES: EPA will accept public comments on this proposed rule until [insert date 30 days from publication]. Due to the time sensitivity of this rulemaking, the comment period cannot be extended. Comments post-marked after this date will be marked "late" and may not be considered. Any person may request a hearing on this proposed rule by filing a request with EPA, to be received no later than [insert 15 days from publication].

ADDRESSES: The public must send an original and two copies of their comments to:

EPA RCRA Docket Clerk, Room 2427 (OS-332)
U.S. Environmental Protection Agency
401 M Street, SW
Washington, DC 20460

Place "Docket number F91-WP2P-FFFFF" on your comments. Copies of materials relevant to this proposed rulemaking are located in the docket at the address listed above. The docket is open from 9:00 a.m. to 4:00 p.m., Monday through Friday, excluding Federal holidays. The public must make an appointment to review docket materials by calling (202) 260-9327. The public may copy 100 pages from the docket at no charge; additional copies are \$0.15 per page. Requests for a hearing should be addressed to Mr. David Bussard at:

Characterization and Assessment Division
Office of Solid Waste
U.S. Environmental Protection Agency
401 M Street, SW
Washington, DC 20460.

Comments on the CERCLA proposal should be sent in triplicate to:

Emergency Response Division, Docket Clerk
ATTN: Docket No. RQ
Room 2427
U.S. Environmental Protection Agency
401 M Street, SW
Washington, DC 20460

Copies of materials relevant to the CERCLA portions of this rulemaking also are located in Room 2427 at the above address.

FOR FURTHER INFORMATION CONTACT: The RCRA/Superfund Hotline, at (800) 424-9346 (toll-free) or (703) 920-9810, in the Washington, DC metropolitan area. The TDD Hotline number is (800) 553-7672 (toll-free) or (703) 486-3323, locally. For technical information on the RCRA hazardous waste listings contact Mr. Edward L. Freedman (202) 260-3657, Office of Solid Waste (OS-333), U.S. Environmental Protection Agency, 401 M Street, SW, Washington, DC, 20460.

For technical information on the CERCLA proposal, contact: Gerain H. Perry, Response Standards and Criteria Branch, Emergency Response Division (OS-210), U.S. Environmental Protection Agency, 401 M Street, SW, Washington, DC 20460, (202) 260-5650.

SUPPLEMENTARY INFORMATION: The contents of today's preamble are listed in the following outline:

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I. Background

Section 3001(e) of RCRA required EPA to determine whether to list wastes containing chlorinated dioxins and chlorinated dibenzofurans. As part of this mandate, the Agency initiated a listing investigation of dioxin-containing wastes from pentachlorophenol wood preserving processes and pentachlorophenate surface protection processes. Two other similar wood preserving processes that used creosote and aqueous inorganic formulations containing chromium or arsenic were also included in this investigation.

On December 30, 1988, EPA proposed four listings pertaining to wastes from wood preserving and surface protection, as well as a set of standards for the management of these wastes. The Agency finalized three generic hazardous waste listings for wastes from wood preserving processes and Subpart W for the management of these wastes on drip pads on November 15, 1990 and published the final rule in the Federal Register on December 6, 1990.

On December 31, 1990 the American Wood Preservers Institute (AWPI) formally requested a stay of the effective date for compliance, and also filed a petition for judicial review of the

rule. The Agency has met with the industry to solicit and collect additional information to support this request. After reviewing the information and conducting independent studies and site visits, the Administrator signed an administrative stay on June 5, 1991 (see 56 FR 27332, June 13, 1991). This action conditionally stayed the applicability of the F032, F034, and F035 listings in process areas at wood preserving plants and stayed certain other portions of the rule, including the impermeability requirement for the drip pad surface sealer, coating, or cover. Furthermore, the Agency has identified other problems with implementation.

The purpose of this notice is to propose changes to the F032, F034, and F035 listings and portions of the Subpart W requirements for drip pads. The scope of today's proposed regulation does not include wastes that are included in the K001 listing.

II. General Overview of the Rule and Proposed Modifications

A. Current Waste Listings

On November 15, 1990, the Agency promulgated three generic hazardous waste listings for wood preserving wastes from processes that use formulations of pentachlorophenol, creosote, or chromium and arsenic. Portions of these listings were

administratively stayed on June 5, 1991 as set forth below:

F032¹ Wastewaters, process residuals, preservative drippage, and spent formulations from wood preserving processes generated at plants that currently use or have previously used chlorophenolic formulations (except potentially cross-contaminated wastes that have had the F032 waste code deleted in accordance with §261.35 of this chapter and where the generator does not resume or initiate use of chlorophenolic formulations). This listing does not include K001 bottom sediment sludge from the treatment of wastewater from wood preserving processes that use creosote and/or pentachlorophenol. (Note: The listing of wastewaters that have not come into contact with process contaminants is stayed administratively. The listing for plants that have previously used chlorophenolic formulations is administratively stayed whenever these wastes are covered by the F034 or F035 listings. These stays will remain in effect until further administrative action is taken.).

F034¹ Wastewaters, process residuals, preservative drippage, and spent formulations from wood preserving processes generated at plants that use creosote formulations. This listing does not include K001 bottom sediment sludge from the treatment of wastewater from wood preserving processes that use creosote and/or pentachlorophenol. (Note: The listing of wastewaters that have not come into contact with process contaminants is stayed administratively. The stay will remain in effect until further administrative action is taken.).

F035¹ Wastewaters, process residuals, preservative drippage, and spent formulations from wood preserving processes generated at plants that use inorganic preservatives containing arsenic or chromium. This listing does not include K001 bottom sediment sludge from the treatment of wastewater from wood preserving processes that use creosote and/or pentachlorophenol. (Note: The listing of wastewaters that have not come into contact with process contaminants is stayed administratively. The stay will remain in effect until further administrative action is taken.).

¹The F032, F034, and F035 listings are administratively

stayed with respect to the process area receiving drippage of these wastes provided persons desiring to continue operating notify EPA by August 6, 1991 of their intent to upgrade or install drip pads and by November 6, 1991 provide evidence to EPA that they have adequate financing to pay for drip pad upgrades or installation as provided in the administrative stay. The stay of the listings will remain in effect until February 6, 1992 for existing drip pads and until May 6, 1992 for new drip pads.

(For detailed discussions of the process and wastes see the December 30, 1988 **Federal Register** (53 FR at 53286) and the December 6, 1990 **Federal Register** (55 FR at 50449)). In addition to the hazardous waste listings, the Agency promulgated Subpart W drip pad standards that outline design criteria and operating requirements for drip pads used to manage treated wood drippage, precipitation, and/or surface water run-on. A portion of these standards was administratively stayed on June 5, 1991 (see 56 FR 27332, June 13, 1991).

B. Elements of the Wood Preserving Regulations that Require Modification

With today's notice, EPA is proposing to revise several elements of the wood preserving hazardous waste regulations and is requesting comments on these issues. The Agency is proposing to: (1) eliminate the F032 classification for certain wastes generated by past users of chlorophenolic formulations provided that any wastewaters, drippage, process residuals, or spent preservative are regulated as a hazardous waste (Toxicity Characteristic wastes, F034 or F035); (2) narrow the scope of the wastewater listings to those wastewaters that come in contact

with process contaminants; (3) require cleanup of storage yard drippage and contingency plans for response to incidental drippage in storage yards; (4) remove the requirement that new drip pads be impermeable; (5) add a requirement that new drip pads have leak collection devices (6) revise the requirement that all existing drip pads be impermeable to reflect data on the permeabilities of available coatings, sealers, or covers; (7) require that drip pad surface materials be chemically resistant to the preservative being used and that these surface materials be maintained free of cracks, gaps, corrosion, or other deterioration; (8) revise the requirement that drip pads be cleaned weekly to a requirement that drip pads be cleaned in a manner and frequency such that the entire surface of drip pads can be inspected weekly; (9) revise the schedule for upgrading existing drip pads to allow 15 years for the incorporation of liners and leak detection systems; and (10) revise the CERCLA designation of hazardous substances to reflect the modifications in the listings.

The Agency is also requesting comment as to whether the standards for new drip pads should allow the choice of either an impermeable surface (e.g., sealers, coatings, or covers for concrete drip pads) or a liner with a leak detection system.

III. Basis for Rule Modifications

A. Provisional Elimination of the F032 Designation for Wastes Generated by Past Users of Chlorophenolic Formulations

The current listing description for F032 states that the listing applies to wastes generated from wood preserving processes at plants that currently use or have previously used chlorophenolic formulations. However, a facility may "delete" its wastes from the F032 listing if the process no longer uses chlorophenolic solutions and if the facility meets the other criteria outlined in §261.35 (see 55 FR 50483).

The Agency is proposing to eliminate the applicability of the F032 listing to wastes generated by past users of chlorophenolic formulations that have ceased using such formulations provided that any wastewaters, process residuals, preservative drippage, and spent formulations exhibit the toxicity characteristic (TC) or are listed as F034 or F035. This proposed change would apply only to wastewaters, process residuals, preservative drippage, and spent formulations generated after the facility ceases to use chlorophenolic formulations. This proposed amendment differs from the June 5, 1991 administrative stay in that it incorporates the TC designation as well as F034 and F035 wastes. Final action on this issue will result in the removal of the administrative stay that is currently in effect for this modification. Wastes from

wood preserving processes that previously used chlorophenolic formulations but are currently using creosote and/or inorganic preservatives containing arsenic or chromium are already classified as hazardous under federal regulations under the F034 and/or F035 listings. The regulatory standards for F032, F034, and F035 wastes are identical, so that the F032 listing does not carry with it a stricter regulatory regime or result in different substantive regulation for the wastes other than the timing of the effective date. Therefore, there is no additional environmental benefit from regulating wastes from past users of chlorophenolic formulations (F032) provided that the wastes will be classified as TC hazardous, F034, or F035. The Agency requests comment on this proposed action.

The Agency does note, however, that the issue of chlorophenolic cross-contamination will be relevant to previous use of chlorophenolic formulations when EPA establishes treatment standards for F032, F034, and F035 wastes under the land disposal restrictions program. The fact that a waste may be classified as F034 and/or F035 rather than F032 does not eliminate the need for the Agency to promulgate treatment standards that address the chlorophenolic formulations, and the various dioxins and furans that may be present in these wastes as a result of equipment cross-contamination. Thus, the Agency anticipates including standards for these constituents in all of the treatment standards for the listed wood preserving wastes.

EPA emphasizes that facilities that have switched from chlorophenolic formulations to formulations other than creosote or inorganic formulations containing chromium or arsenic are still subject to the F032 requirements for past users. Therefore, unless these facilities have deleted the F032 listing in accordance with §261.35, their wastes must be classified as F032 and remain subject to all applicable RCRA requirements.

Furthermore, this regulatory modification does not affect the regulation of materials contaminated with F032 waste under the Agency's "contained-in" policy (see letter from EPA to the New York State Department of Environmental Conservation, dated June 19, 1989). Environmental media such as soils, ground water, or surface waters that are contaminated with F032 wastes are considered F032 hazardous waste when managed because they "contain" a listed hazardous waste. Even though the facility may no longer use chlorophenolics or may no longer be operating, contaminated media that contain a listed hazardous waste from past activities must be managed as the listed hazardous waste when actively managed. It is important to note that media contaminated with wastewaters, process residuals, preservative drippage, or spent formulations generated at the time a chlorophenolic formulation was in use would still be subject to the F032 listing as a result of the "contained-in" policy. See the July 1, 1991 **Federal Register** (56 FR 30192) for additional discussion. EPA requests information on the quantities of F032,

F034, and F035 wastes that must be disposed of offsite, and also the quantities and frequency of generation of contaminated soil and debris meeting these three listing descriptions.

B. Classification of Wastewaters as a Hazardous Waste

In today's notice, the Agency is proposing to narrow the scope of the wastewater listings for F032, F034, and F035 so that uncontaminated wastewaters are not included in the listings. Final action on this issue will result in the removal of the administrative stay that is currently in effect regarding this modification. The preamble to the December 30, 1988, proposed rule (see 53 FR 53288) described the types of wastewaters to be included in the scope of the F032, F034, and F035 listings. The Agency did not intend for the listings to apply to uncontaminated waters at wood preserving plants and subsequently administratively stayed the applicability of the listings to wastewaters that have not come in contact with process contaminants (56 FR 27332). "Process contaminants", as used here, would include hazardous constituents from formulations of preservative and any F032, F034, or F035 wastes. Thus, wastewaters that have come in contact with either chlorophenolic formulations, creosote formulations, or inorganic formulations of arsenic or chromium or the listed wastes from wood preserving plants (e.g., F032, F034, F035) should be designated as F032,

F034, or F035 waste. Waters that do not contact chlorophenolic, creosote, or inorganic formulations containing arsenic or chromium or the listed wastes from wood preserving plants (e.g., F032, F034, F035) should not be considered as within the scope of the F032, F034, or F035 listings. For example, condensate from drying kilns (that have never been used to dry treated wood) used to dry untreated wood would not be considered F032, F034, or F035 waste. As an additional example, wastewater generated from steam conditioning untreated wood in cylinders that have never been used for steam conditioning treated wood should also not be considered F032, F034, or F035 waste. Also, rainwater that is collected in a fashion that keeps it segregated from preservative formulations or listed wastes from wood preserving plants would not be considered F032, F034, or F035 waste until it contacted preservative formulations or listed wood preserving wastes. The Agency requests comment on this proposed action.

However, if initially uncontaminated wastewater is mixed with contaminated wastewater (as in a centralized wastewater treatment system) or with process contaminants (such as rainwater on a process area drip pad or drip pad washdown), then the entire volume of wastewater is hazardous waste by the mixture rule (40CFR 261.3(a)). For example, rainwater collected on drip pads and conveyed to associated collection systems would be considered a hazardous waste because it contacts listed wastes (such as drippage, process residuals, and wastewaters) from wood

preserving operations. Thus, this proposal, if adopted, could lower hazardous waste generation where it is cost effective to segregate wastewaters to prevent contamination.

C. Drippage in Storage Yards

The Agency is proposing to require that owners/operators of wood preserving plants develop and implement contingency plans for immediate response to incidental drippage in storage yards. These contingency plans are proposed to be in accordance with subparts D of parts 264 and 265. This requirement would apply to both large quantity generators and generators of between 100 kg and 1000 kg per month. The contingency plan must describe how owners and operators plan to respond to incidental storage yard drippage. Owners and operators must also document the response to incidental storage yard drippage and maintain such documentation for a period of three years. Subpart W regulations require that treated wood remain on the drip pad until all drippage has ceased before moving it to the storage yard (§§264.573(k) and 265.443(k)). Even so, infrequent and incidental drippage may occur from the treated wood after its removal from the drip pad. Infrequent and incidental drippage may occur due to the effects of weather, type of wood, or type of preservative. EPA recognized in the final rulemaking that the de minimis losses that could occur would not require the storage yard to be equipped with a drip pad (55 FR at 50456, December 6,

1990).

The Agency further notes that this type of incidental drippage would not constitute illegal disposal of a hazardous waste provided that there is an immediate response to the discharge of the drippage (§§ 264.1(g)(8)(i)(A) and 265.1(c)(11)(i)(A) (persons responding immediately to discharges of hazardous wastes are not subject to regulatory standards for the response activities, although the hazardous wastes become subject to subtitle C regulation after they are removed)).

For the purposes of this rulemaking, the Agency proposes to require that the response to incidental storage yard drippage must include cleanup of the incidental drippage. The contaminated media would then be managed as hazardous waste. Furthermore, the cleanup must be conducted in accordance with the contingency plan and emergency measures of subparts D of parts 264 and 265. The requirements of Subpart D are applicable to incidental and infrequent drippage because such drippage would constitute an unplanned sudden or nonsudden release of hazardous waste or hazardous waste constituents to air soil or surface water (§ 264.51(a) and § 265.51(a)). The Agency requests comment on this proposed action.

D. Drip Pad Surface Coating, Sealer, and Cover Requirements

Currently, Subpart W requires both new and existing drip pads to be impermeable in order to contain drippage and mixtures of drippage and precipitation while being routed to an associated collection system [§264.573(a)(4) and §265.443(a)(4)]. For example, concrete drip pads would be required to have impermeable coatings, sealers, or covers. Subpart W also requires a synthetic liner and leak detection system for new pads to prevent releases into the subsurface soil, ground water, or surface water [§264.573(b)(1-2) and §265.443(b)(1-2)].

The existing regulations allow pads that were constructed prior to December 6, 1990, to operate for 2 years after the effective date or until the pad reaches 15 years of age, whichever is later, before it must be upgraded to incorporate liners and leak detection (§§ 264.571 and 265.441). Installation of liners and leak detection systems was required for new drip pads (i.e., those constructed after December 6, 1990) in addition to the requirement that new drip pads be impermeable.

The Agency proposes to modify the regulations for new drip pads to remove the requirement that they be impermeable. Thus, for new drip pads, a liner and leak detection system would have to be installed below the drip pad, but a surface sealer, coating, or cover would not be required for concrete drip pads in

order to meet the Subpart W requirements. Although sealers, coatings, or covers would not be required for new pads, the Agency does note that the use of a surface material could eliminate or minimize the amount of contaminated pad material to be disposed of when the facility closes the pad. The Agency also notes that, depending on the quality of construction, a drip pad without a surface sealer, coating, or sealer may have an increased possibility of leakage to the underlying liner (see the following section on proposed leak collection requirements for new drip pads) and thus, recommends use of a sealer, coating, or cover to reduce the need for major cleanup efforts if the concrete cracks, allowing leakage to the liner. The use of a coating in addition to a liner, leak collection, and leak detection would have to be determined by the facility in consideration of needs to balance capital and maintenance costs. The Agency believes that a well-maintained drip pad of high-quality construction with no cracks or gaps can provide substantial containment, and that a liner would provide secondary containment. In such a case, the additional requirement for a sealed, coated, or covered surface would unnecessarily increase control beyond secondary containment. EPA requests comment on the proposal to remove the requirement for a sealed/coated surface for new drip pads constructed of materials such as concrete. The requirement for a sealed, coated, or covered surface for existing drip pads constructed of materials such as concrete would not be affected by this proposed modification.

EPA is aware that the requirement for an absolutely impermeable surface cannot be practicably met. The Agency's intent in the December 6, 1990, rule was to require a surface coating, sealer, or cover for concrete drip pads (or similar porous or easily-fractured materials of construction) that would provide incremental protection against permeation of preservative into the drip pad and thus serve to ensure less permeability than would be achieved with the drip pad itself. This requirement would be applicable to concrete or other porous or easily-fractured materials of construction but may not be applicable to materials of construction such as steel. Today, the Agency is proposing the performance standard that drip pads have a hydraulic conductivity of less than 1×10^{-7} centimeters per second. The Agency recognizes that the most common material for drip pad construction is concrete, thus this standard has been derived from the theoretical conductivity of unfractured, well-constructed concrete. Thus, drip pads made of concrete or other porous or easily-fractured materials of construction would be required to have sealers, coatings, or covers that are resistant to vertical infiltration of water vapor such that the hydraulic conductivity through the surface material is less than 1×10^{-7} centimeters per second. The Agency believes that the use of water for infiltration rate determination represents a "worst case" scenario for creosote and chlorophenolic formulations at the time when creosote and chlorophenolic formulations are mixed with precipitation on uncovered drip pads, surface run-on water,

and when drip pads are cleaned with steam or water. Supporting documentation for this standard can be found in the docket for this rulemaking. Several commercially available surface coatings providing equivalent or better resistance to permeation have been identified by the Agency. A typical method for measuring the infiltration rate of water vapor into a surface coating is ASTM E-96 Procedure E. Procedure E is a conservative procedure which is run at a temperature of 100 degrees Fahrenheit and uses a desiccant to maximize vapor pressure differential.

Water seepage is commonly expressed as flux (units of mass or volume per area per time). Flux can be converted into hydraulic conductivity. Assuming that a 20,000ft² drip pad has a 10% constantly wetted surface (i.e. 2,000 ft² is constantly wet), the rate of water permeation through unfractured, well-constructed concrete with a 1×10^{-7} centimeter per second hydraulic conductivity would be approximately 4 gallons per day. Use of coatings, sealers, or covers with a hydraulic conductivity less than that of well-constructed concrete would reduce the rate of permeation, but as greater performance is required, the availability of suitable materials is decreased. EPA is proposing that this quantity of potentially contaminated water or other wastes that could permeate a well-designed and unfractured drip pad is acceptable. EPA is, however, proposing to require a coating, sealer, or cover on such pads of a lower permeability than a well-designed concrete pad (1×10^{-7} centimeters per

second). The reason for this is that such surface materials will help assure that the permeability in actual field conditions does not exceed that of a well-designed concrete pad. The Agency is also proposing to require that surface materials used to limit hydraulic conductivity be maintained free of cracks and gaps that would adversely affect the hydraulic conductivity of the surface materials and is proposing to require that such materials be chemically compatible with any preservatives that contact the drip pad.

The limitation to reliance on concrete as the only protective containment barrier for existing pads is that concrete can develop microfractures that significantly increase the permeability, but are difficult to detect visually. A pad with numerous microfractures could have permeabilities that may release as much as 1000 times more than that of a pad without microfractures. EPA believes a low permeability coating will help assure that microfractures do not significantly reduce the protectiveness of a concrete pad. The stresses that produce microfractures in some concrete pads should not produce the same sort of fractures in the overlying coating because the coating has different properties of flexibility and should not be prone to the same cracking pattern. A standard for the coatings of less than 1×10^{-7} centimeters per second provides that protection while still assuring that a wide range of coating materials are available.

EPA is also aware of a number of coatings available that have permeabilities on the order of 1×10^{-9} centimeters per second. EPA requests comment and data on whether those coatings are appropriate for these circumstances and whether the permeability standard should be lower than that proposed by the Agency. The Agency solicits comments on the potential compliance costs and environmental benefits of a lower permeability standard.

The Agency has found no generally accepted test methods for determining the permeability of a surface sealer, coating, or cover once it has been applied to a drip pad. The EPA has found that such information on permeability is typically provided by manufacturers. Therefore, the Agency will rely on permeability data supplied by the manufacturer of the surface material in order to verify that it meets the minimum permeability standard. The Agency has not required that a specific test method be used for the measurement of permeability. However, the method used must allow for the determination of the mass of preservative formulation that passes through a given area of the surface material over a given time period.

The Agency has limited information and no test data regarding nationally-recognized test methods to measure the hydraulic conductivity of sealers or polymer-modified coatings.

A potential application is Army Corps of Engineers test method CRD-C 48-73 for water permeability of concrete. However, the Agency has no data or indications of this method's acceptability for use with sealers. If there are no standard test methods to determine hydraulic conductivity of a type of surface material, the Agency believes that the material is not suitable for use with drip pads and would not meet the limited permeability requirement.

An additional problem identified with sealers is that they do not provide a protective barrier. A sealer would seep into the pores to provide a surface that would wear with the drip pad rather than prior to wear on the drip pad. Although this provides an advantage relative to coatings in terms of abrasion and frequency of replacement, a sealer may have the disadvantage of cracking if the drip pad cracks. Coatings may not crack when the underlying drip pad cracks. Thus, coatings may be superior from a protectiveness standpoint.

The Agency would consider compliance with this proposed standard as compliance with the impermeability requirement until a final rule addressing the coating standard is promulgated. If the final rule results in a more stringent standard, the Agency would allow a compliance period. The Agency requests comment on the proposed modification to the impermeability requirement for drip pad surface materials. The Agency also requests information

or data regarding sealer and coating permeabilities, and nationally recognized test methods for measuring permeability.

E. Proposed Leak Collection Requirements for New Drip Pads

As mentioned in the prior section, a new drip pad operating without a sealed or coated surface may incur an increased possibility of leakage to the underlying liner system depending on the quality of drip pad construction. Pursuant to § 264.573(m)(1)(iii), an owner/operator who detects a drip pad condition that may have caused or has caused a release of hazardous waste must determine how to repair the drip pad and clean up any leakage from below the pad. As noted in the July 1, 1991, **Federal Register** (56 FR at 30193), the owner/operator need not dig up the drip pad to clean up such releases if the drip pad has a leak collection system below the pad or a drainage system leading to a sump. In order to avoid the necessity of having to dig up drip pads, the Agency is proposing to amend the Subpart W design and operating requirements in § 264.573 and § 265.443 to require that owners/operators of new drip pads install leak collection systems below drip pads and above the liners so that any leakage that penetrates through the drip pad can be collected and removed. The Agency proposes to make these requirements effective for new drip pads that are constructed after the effective date of a final rule incorporating these requirements. Owners and operators would also be required to document the date

and quantity of collection of such leakage. The documentation requirements would apply to all leak collection devices, regardless of when they were installed. This requirement would also apply to new drip pads with sealers, coatings, and covers. The Agency requests comment on the proposed requirement for leak collection systems. This proposed requirement does not affect the responsibility of the owner/operator to remove a drip pad to the extent necessary to clean up any release of hazardous waste to the environment in the event that such a release occurs.

F. Drip Pad Cleaning Requirements

The Agency is proposing to change the requirements for weekly cleaning of drip pads. The December 6, 1990, final rule required that drip pad surfaces must be cleaned thoroughly at least once every seven days such that accumulated residues of hazardous waste or other materials are removed (see §264.573(i) in the July 1, 1991 Federal Register notice and §265.443(i) in the December 6, 1990 Federal Register notice). Furthermore, the regulations required that an appropriate and effective cleaning technique be used that included, but was not limited to, rinsing, washing with detergents or other appropriate solvents, or steam cleaning. Owners and operators were required to document the date and time of each cleaning and the cleaning procedure used in the facility's operating log. As noted in the July 1, 1991 Technical Correction Notice (see 56 FR at 30193), the regulations

have been misinterpreted to require weekly water washing of drip pads. This was not the Agency's intent. As previously described, the Agency's intent for weekly cleaning was to allow for thorough inspections of drip pad surfaces on a weekly basis.

The Agency is aware that there may be circumstances in which a weekly cleaning would not serve to improve the quality of inspection of a drip pad surface but rather would cause the unnecessary generation of hazardous wastes. Situations where a drip pad has not been used during the previous week and where the type of preservative used would not obscure the surface of the drip pad (such as aqueous solutions) are examples of such circumstances. However, situations in which preservative accumulates on the drip pad or obscures the drip pad in any manner such that a weekly inspection of the entire drip pad surface is hindered should require a weekly cleaning. The Agency does not believe that water, steam, or solvent washings and rinses are the only suitable cleaning methods. The Agency foresees situations where a weekly sweeping would be suitable. The Agency also notes that drip pad cleaning may in certain situations be performed more often than weekly to prevent tracking of hazardous wastes from drip pads.

The Agency is today proposing that cleaning of drip pads be required in a manner and frequency to allow weekly inspections of the entire surface of drip pads. Residues from such cleanings

must be managed as hazardous waste. The existing requirements to document the date and time of each cleaning as well as the cleaning procedure are not changed. This action may serve a useful waste minimization function and may reduce the amount of hazardous waste generated. This proposed action does not affect the requirement to clean drip pads as necessary to meet the 90-day generator requirements (i.e., drip pads must be cleaned by rinsing, steam cleaning, washing with detergents or other solvents at least once every 90 days). The Agency requests comment on the proposed modification to the regulations regarding drip pad cleaning.

G. Timeframe for Existing Drip Pads to Comply with New Drip Pad Standards

The Agency is proposing to allow 15 years from the effective date of a final rule promulgating this standard for owners/operators with existing drip pads to upgrade the pads to meet new drip pad standards. The current regulations require upgrading the pad to meet new drip pad standards (to include a liner and leak detection system) when the pad reaches 15 years of age or 2 years after December 6, 1990, whichever is later. Under the current regulations, an owner/operator may be granted an extension to the deadline if the Regional Administrator finds that the drip pad will continue to be protective of human health and the environment (§§264.571(b)(3) and 265.441(b)(3)).

The Agency believes that if an existing drip pad that meets Subpart W standards for existing drip pads is well-constructed, well-maintained, and certified annually, the maximum pad life may be greater than 15 years. The 15 year age standard may not reflect the capability of a drip pad to protect human health and the environment. Thus, the Agency believes that factors including, but not limited to, structural integrity, surface integrity, and coating integrity are more relevant to protection of human health and the environment than age of the drip pad. The Agency recognizes that drip pads do have limited lives and is proposing the 15 year deadline. The current requirement to remove from service portions of drip pads that are structurally unsound or have cracks or gaps (§ 264.573 (m)(1)(ii) and § 265.443 (m)(1)(ii)) would not be affected by this rulemaking. Furthermore, the requirement to remove from service a drip pad that did not pass the annual certification would not be affected by this rulemaking. Drip pads without liners and leak detection systems must be certified annually. As a result of these continuing requirements, the protectiveness of existing drip pads to human health and the environment will not be compromised. The 15 year timeframe will also allow additional time for facilities to accumulate the necessary resources required to retrofit existing drip pads with liners and leak detection systems.

After 15 years from the effective date of a final rule promulgating this modified standard, facilities will be required

to retrofit existing drip pads with liners and leak detection systems. Owners/operators will continue to have the opportunity to demonstrate to the Regional Administrator that an existing drip pad remains protective of the environment (e.g., that no releases have occurred to the environment) and thus may qualify for an extension to the deadline. EPA requests comment on the proposed change to the schedule for upgrading existing drip pads to allow owner/operators 15 years from the effective date of a final rulemaking in this regard to meet new drip pad standards. The Agency is specifically requesting comment as to whether a time period of less than 15 years should be considered.

H. Choice of Surface Coatings or Liner/Leak Detection Systems for New Drip Pads

Surface sealers and coatings can provide protection from releases to the drip pad. However, in the event of drip pad failure (cracks or deterioration), contaminants may be released to the environment without the knowledge of the facility operator if there is no liner underlying the pad. For this reason, the Agency believes that a liner and leak detection system below the drip pad offers the greatest degree of protection of human health and the environment. However, the Agency is interested in receiving information on the protectiveness of surface coatings as compared to that of liner systems. Specifically, EPA requests comment on an alternative approach that would give owners and operators of new pads the option of installing either 1) a liner

and leak detection system underneath the drip pad, or 2) a sealer/coating on the surface of the drip pad. Under this approach, new pads with no liner/leak detection system would be deemed in compliance with Subpart W if they applied a surface sealer/coating to the drip pad that met the permeability requirements proposed today. The Agency requests data that demonstrate whether the level of protection provided by a surface sealer/coating is equivalent to that afforded by a liner and leak detection system.

Technical differences exist between liner/leak detection systems installed below a drip pad and surface materials used to coat or cover a drip pad. The goals of the two systems also differ. A coating provides a primary barrier against continuous chemical attack and limits permeation through the pad, whereas a liner provides backup protection against unplanned, infrequent, and short term chemical exposure. Coatings experience moderate to heavy traffic by machinery and personnel; liners do not experience direct traffic, although they may be subject to physical stress resulting from activity on the overlying drip pad.

The Agency has compiled the following information on the technical and economic differences between surface coatings and liners. The major design criteria are more complex for coatings due to the different operating conditions to which they are

exposed. For instance, the selection factors that must be considered for coatings include chemical resistance, bonding capability, flexibility, permeability, method and ease of application, and resistance to impact. Also, it may be difficult to determine when a coated or sealed surface has been breached. When selecting a liner, however, the factors that must be considered are greatly reduced in number due to the fact that direct vehicular contact and frequent exposure to preservative need not be considered. However, liner/leak detection systems are also subject to significant design considerations such as permeability and chemical resistance. Verification of proper operation of liner/leak detection systems may be difficult to ascertain after installation has been completed.

It is the Agency's position that a drip pad with a liner/leak detection system provides better environmental protection and requires less maintenance than a drip pad with a surface coating only. Tradeoffs between the systems exist in terms of cost of initial installation and long-term maintenance and replacement. The Agency intends to maintain the current requirements for new drip pads to have liners and leak detection systems and for existing drip pads to retrofit with liner and leak detection systems in the future. However, the Agency requests comment on the relative merits of this approach as compared to allowing a choice of liners and leak detection system or surface coatings for new drip pads.

IV. State Authority

A. Applicability of Final Rule in Authorized States

Under section 3006 of RCRA, EPA may authorize qualified States to administer and enforce the RCRA program within the State. (See 40 CFR Part 271 for the standards and requirements for authorization.) Following authorization, EPA retains enforcement authority under sections 3007, 3008, 3013, and 7003 of RCRA, although authorized States have primary enforcement responsibility.

Before the Hazardous and Solid Waste Amendments of 1984 (HSWA) amended RCRA, a State with final authorization administered its hazardous waste program entirely in lieu of the Federal program in that State. The Federal requirements no longer applied in the authorized State, and EPA could not issue permits for any facilities located in the State with permitting authorization. When new, more stringent Federal requirements were promulgated or enacted, the State was obligated to enact equivalent authority within specified time frames. New Federal requirements did not take effect in an authorized State until the State adopted the requirements as State law.

By contrast, under section 3006(g) of RCRA, 42 U.S.C.

6926(g), new requirements and prohibitions imposed by the HSWA take effect in authorized States at the same time that they take effect in nonauthorized States. EPA is directed to implement those requirements and prohibitions in authorized States, including the issuance of permits, until the State is granted authorization to do so. While States must still adopt HSWA-related provisions as State law to retain final authorization, the HSWA requirements apply in authorized States in the interim.

Certain portions of today's rule are proposed pursuant to section 3001(e)(2) of RCRA, a provision added by HSWA. These portions include the listing of F032. Therefore, the Agency is proposing to amend Table 1 in 40 CFR 271.1(j), which identifies the Federal program requirements that are promulgated pursuant to HSWA, and that take effect in all States, regardless of their authorization status. States may apply for either interim or final authorization for the HSWA provisions identified in Table 1 [in 40 CFR 271.1(j)], as discussed in the following section of this preamble. The remaining portions of today's rule, as applied to F034 and F035, are proposed pursuant to pre-HSWA authority. These provisions, therefore, will become effective only in those States without final authorization, and will become effective in States with final authorization once the State has amended its regulations and the amended regulations are authorized by EPA.

B. Effect on State Authorizations

As noted above, EPA would implement the HSWA provisions in today's proposed rule when a final rule has been promulgated and is in effect in authorized States until they modify their programs to adopt the final rule, and the modification is approved by EPA.

Pursuant to section 3001(e) of RCRA, a provision added by HSWA, EPA added F032 to the list of hazardous wastes from non-specific sources (40 CFR 261.31) in the December 6, 1990 rule. Thus the changes proposed in today's rule, in connection with F032, will take effect in all States (authorized and unauthorized) on the effective date. The elements of today's proposed rule as they apply to F034 and F035 are not immediately effective in authorized States since the requirements are not imposed pursuant to HSWA. These regulations will apply in authorized States when F034 and F035 become hazardous wastes in that State, and when the State is authorized for the drip pad standards. However, should such wastes exhibit the Toxicity Characteristic, which was promulgated under HSWA authority and is effective in authorized States, then such wastes may be managed on drip pads meeting the modified Subpart W standards.

1. HSWA Provisions

Because portions of the final rule would be promulgated pursuant to HSWA, a State submitting a program modification would be able to apply to receive either interim or final authorization under section 3006(g)(2) or 3006(b), respectively, on the basis of requirements that are substantially equivalent or equivalent to EPA's requirements. The procedures and schedule for State program modifications under section 3006(b) are described in 40 CFR 271.21. It should be noted that all HSWA interim authorizations will expire January 1, 1993 (see 40 CFR 271.24(c)).

2. Non-HSWA Provisions

Other portions of today's notice will not be effective in authorized States since the requirements are not being imposed pursuant to HSWA. These portions include the modifications to the December 6, 1990 rule as they apply to F034 and F035. These requirements will be applicable only in those States that do not have final authorization. In authorized States, these requirements will not be applicable until the States revise their programs to adopt equivalent requirements under State law, unless the wastes are designated as hazardous due to the Toxicity Characteristic, which would require an owner or operator to comply with the drip pad standards administered under Federal

law.

3. Modification Deadlines

40 CFR 271.21(e)(2) requires that States with final authorization must modify their programs to reflect Federal program changes and submit the modifications to EPA for approval. The deadline by which the States must modify their programs to adopt this proposed regulation will be determined by the date of promulgation of the final rule in accordance with section 271.21(e)(2). Once EPA approves the modification, the State requirements become Subtitle C RCRA requirements.

States with authorized RCRA programs already may have regulations similar to those in today's proposed rule. These State regulations have not been assessed against the Federal regulations being proposed today to determine whether they meet the tests for authorization. Thus, a State would not be authorized to implement these proposed regulations as RCRA requirements until State program modifications are submitted to EPA and approved. Of course, States with existing regulations may continue to administer and enforce their regulations as a matter of State law.

States that submit their official application for final authorization less than 12 months after the effective date of

these standards are not required to include standards equivalent to these standards in their application. However, States must modify their programs by the deadlines set forth in 40 CFR 271.21(e). States that submit official applications for final authorization 12 months or more after the effective date of these standards must include standards equivalent to these standards in their applications. 40 CFR 271.3 sets forth the requirements that States must meet when submitting final authorization applications.

It should be noted that authorized States are only required to modify their programs when EPA promulgates Federal standards that are more stringent or broader in scope than existing Federal standards. Section 3009 of RCRA allows States to impose standards more stringent than those in the Federal program. For those Federal program changes that are less stringent or reduce the scope of the Federal program, States are not required to modify their programs. See 40 CFR 271.1(i).

V. CERCLA Designation and Reportable Quantities

All hazardous wastes listed pursuant to 40 CFR Section 261.31 through Section 261.33, as well as any solid waste that meets one or more of the characteristics of a RCRA hazardous waste (as defined at 40 CFR Section 261.21 through Section 261.24), are hazardous substances as defined at Section 101(14)

of the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA), as amended. The CERCLA hazardous substances are listed in Table 302.4 at 40 CFR Section 302.4 along with their reportable quantities (RQs). CERCLA Section 103(a) requires that persons in charge of vessels or facilities from which a hazardous substance has been released in a quantity that is equal to or greater than its RQ shall immediately notify the National Response Center of the release at 1-800/ 424-8802 or at 1-202/ 426-2675. In addition, Section 304 of the Superfund Amendments and Reauthorization Act of 1986 (SARA) requires the owner or operator of a facility to report the release of a CERCLA hazardous substance or an extremely hazardous substance to the appropriate State emergency response commission (SERC) and to the local emergency planning committee (LEPC) when the amount released equals or exceeds the RQ for the substance or one pound where no RQ has been set.

The release of a hazardous waste to the environment must be reported when the amount released equals or exceeds the RQ for the waste, unless the concentrations of the constituents of the waste are known (48 FR 23566, May 25, 1983). If the concentrations of the constituents of the waste are known, then the mixture rule may be applied. According to the "mixture rule" developed in connection with the Clean Water Act section 311 regulations and also used in notification under CERCLA and SARA (50 FR 13463, April 4, 1985), the release of mixtures and

solutions containing hazardous wastes would need to be reported to the NRC, and to the appropriate LEPC and SERC, when the RQ of any of its component hazardous substances is equalled or exceeded. The mixture rule provides that "[d]ischarges of mixtures and solutions are subject to these regulations only where a component hazardous substance of the mixture or solution is discharged in a quantity equal to or greater than its RQ" (44 FR 50767, August 29, 1979). RQs of different hazardous substances are not additive under the mixture rule, so that spilling a mixture containing half an RQ of one hazardous substance and half an RQ of another hazardous substance does not require a report.

The F032, F034, and F035 listings under RCRA are administratively stayed with respect to the process area receiving drippage of these wastes, provided that persons desiring to continue operating notify EPA by August 6, 1991, of their intent to upgrade or install drip pads, and by November 6, 1991, provide evidence to EPA that they have adequate financing to pay for drip pad upgrades or installation as provided in the administrative stay. During the period of the administrative stay, lasting until February 6, 1992, for existing drip pads and until May 6, 1992, for new drip pads, releases to the environment, within the process area, of drippage that is not a RCRA hazardous waste (and is not otherwise listed as a hazardous substance under CERCLA) will not be considered a release of a

CERCLA hazardous substance. Releases to the environment not covered by the administrative stay, or releases to the environment that occur after expiration of the administrative stay, are considered releases of CERCLA hazardous substances and all release reporting and liability provisions of CERCLA will apply.

Under Section 102(b) of CERCLA, all hazardous waste streams newly designated under RCRA will have a statutorily imposed RQ of one pound unless and until adjusted by regulation under CERCLA. In order to coordinate the RCRA and CERCLA rulemakings with respect to the amended waste stream listings, the Agency today is proposing to amend the listings of waste streams F032, F034, and F035 at 40 CFR 302.4, the codified list of CERCLA hazardous substances, and proposing adjusted RQs of one pound.

VI. Compliance Procedures and Deadlines

For discussion on compliance procedures for the final wood preserving rule, see section XI of the December 6, 1990 preamble (55 FR 50479) and the administrative stay published on June 13, 1991 (56 FR 27332). Specifically, in regard to meeting the permeability requirements of this proposed rule, the Agency has decided to extend the compliance date six months if a different permeability number is chosen which is lower than the proposed 1

x 10^{-7} cm/s. If the minimum permeability value does not change, the compliance date will be the same as the promulgation date of this final modification rule.

VII. Regulatory Analyses

A. Executive Order 12291

Under Executive Order 12291, the Agency must judge whether a regulation is "major" and thus subject to the requirement to prepare a Regulatory Impact Analysis. The proposed rule today is not major because it will not result in an effect on the economy of \$100 million or more, will not result in significantly increased costs or prices (indeed, it may result in decreased costs), will not have significant adverse effects on competition, employment, investment, productivity, and innovation, and will not significantly disrupt domestic or export markets. Therefore, the Agency has not prepared a Regulatory Impact Analysis under the Executive Order for these proposed modifications. This regulation was submitted to the Office of Management and Budget (OMB) for review as required by Executive Order 12291.

Although the Agency is not required to prepare a Regulatory Impact Analysis for this proposed rule, for the benefit of the regulated community, the economic impacts of modifications presented in this proposed rule are discussed below. Where the

Agency has insufficient data to quantify the impact, economic effects are qualitatively discussed. The Agency requests comments and data specifically pertaining to the economic effects of these proposed modifications. The Agency is not requesting comment on the Regulatory Impact Analysis prepared for the wood preserving final rule which was published in the December 6, 1990, **Federal Register**. Comments received on the Regulatory Impact Analysis will not be responded to.

The exclusion from the listing descriptions for wastewaters that have not come into contact with process contaminants will result in a decrease in costs to the extent that segregation of wastewater results in a decreased hazardous waste generation rate. For example, collection of rainwater in a vessel rather than on a drip pad could result in decreased hazardous waste generation. Because generated hazardous waste is taxed in some locations, there may be additional cost savings in the form of a decrease in tax liability. Increases in cost may be incurred in the form of expenditures for collection equipment that may be required to segregate such wastewaters. The Agency has insufficient information to quantify such cost savings or additional costs and requests comment on the cost effects attributable to the proposed wastewater exclusion.

The proposed removal of the applicability of the F032 listing to past users of chlorophenolic formulations that

currently generate TC, F034, or F035 wastes will have a negligible impact on costs. The regulatory requirements associated with a waste that is listed as F032 are not substantively different from those that are listed as F034, F035, or exhibit the TC. Furthermore, the Agency anticipates including standards for dioxins and furans in wood preserving wastes when the treatment standards under the land disposal restrictions program are established. The Agency requests comment on its estimate of minimal cost effects attributable to the proposed revision to the applicability of the F032 listing.

The requirement to clean up incidental and infrequent drippage in storage yards will have cost effects that are highly site, weather, and situation dependent. There will also be costs associated with documenting the cleanup of storage yard drippage. Costs associated with this requirement are also dependent on the efforts undertaken by individual plants to eliminate or minimize such drippage to incidental amounts. These efforts would include the use of vacuum cycles and holding treated wood on drip pads for an appropriate amount of time. Because storage yard drippage is expected to occur infrequently and only in incidental amounts, the disposal costs associated with storage yard drippage should be minimal and will amount to approximately \$100 per 55-gallon drum of inorganic-contaminated soils and range from \$60 to \$450 per drum of organic-contaminated soil, depending on whether the soil is landfilled or incinerated. The Agency requests comments

on its estimate of minimal cost effects attributable to the proposed requirement for cleanup of incidental and infrequent storage yard drippage and the costs of documentation associated with such cleanups.

The proposed allowance of a 15 year time period for the upgrading of existing drip pads to new drip pad standards will result in a decrease in costs. The cost savings resulting from this proposed action are due to the incurrence of upgrade costs at a later time than would be the case under the current schedule which is based on drip pad age. The Agency does not have data that reflects the age distribution of existing drip pads. However, under an assumption that all wood preserving plants were required to immediately install new drip pads, a 15 year deferral in this requirement would amount to an estimated \$5.5 million annual cost savings to the industry for the next 20 years. The Agency requests comment on the costs/benefits attributable to a 15 year upgrade schedule.

The proposed removal of the requirement that new drip pads be impermeable will decrease costs by the amount attributable to the application of coatings and sealers. The installed cost of low cost sealers and coatings ranges between \$2 to \$5 per square foot of drip pad, the savings to a plant with a 10,000 square foot drip pad would range from \$20,000 to \$50,000. The Agency requests comment on the cost benefits attributable to the removal

of the requirement for coatings or sealers.

The proposed change in the drip pad cleaning requirements from a weekly basis to as needed to conduct weekly drip pad inspections will also reduce costs. Cost reductions will mostly benefit users of inorganic preservatives which are dissolved in water. Such aqueous solutions will tend to not obscure drip pad surfaces and will result in a greatly decreased frequency of cleaning. The oil-based preservatives, particularly creosote, will not benefit to the same degree because they will tend to obscure the drip pad surface. The cost savings may primarily result from reduced taxes on hazardous waste generation. The Agency has insufficient data to quantify these cost effects and requests comments regarding the cost savings resulting from the proposed changes in the cleaning requirements.

The proposed change in drip pad permeability requirements (from "impermeable" to 1×10^{-7} centimeters per second) should have no cost effects because there are no changes in requirements for a surface coating or sealer where these requirements would be applicable. The Agency requests comment on the estimated negligible cost effect attributable to the limited permeability requirement.

The proposed requirement that new drip pads have leak collection devices should have minimal impact on costs. The

previous requirement for leak detection devices can be considered the same requirement if a perforated pipe leading to a sump is used to detect leakage. The Agency requests comment on its assessment of the cost impact resulting from the proposed leak collection requirement.

B. Regulatory Flexibility Analysis

Pursuant to the Regulatory Flexibility Act, 5 U.S.C. 601-612, whenever an agency is required to publish a general notice of rulemaking for any proposed or final rule, it must prepare and make available for public comment a regulatory flexibility analysis that describes the impact of the rule on small entities (i.e., small businesses, small organizations, and small governmental jurisdictions). However, if the head of the agency certifies that the rule will not have a significant impact on a substantial number of small entities, no regulatory flexibility analysis is required.

The Agency examined the potential effects on small entities for the December 6, 1990 final rule. In that rule, EPA concluded that the rule did not have a significant effect on a substantial number of small entities. Therefore, EPA did not prepare a formal Regulatory Flexibility Analysis (RFA) in support of the rule. Details on small business impacts are available in the Regulatory Impact Analysis for the rule. Today's proposed rule

reduces the potential effects identified for the December 6, 1990 rule, particularly by removing the applicability of the F032 listing to past users of chlorophenolic formulations that generate TC, F034 or F035 wastes. As a result, a formal RFA was not prepared in support of today's proposed rule.

VIII. Paperwork Reduction Act

The information collection requirements in today's proposed rule will be submitted for approval to the Office of Management and Budget (OMB) under the Paperwork Reduction Act, 44 U.S.C. 3501 et. seq. An Information Collection Request document has been prepared by EPA (ICR No. 1579) and a copy may be obtained from Sandy Farmer, Information Policy Branch, EPA, 401 M Street, S.W. (PM-223Y), Washington, D.C. 20460 or by calling (202) 260-2740. This ICR will amend the information collection requirements submitted to support the administrative stay that was published July 13, 1991 (56 FR 27332) and approved by the Office of Management and Budget under the control number 2050-0115.

A revised public reporting burden for this collection of information is estimated to average about 338 hours, including time for reviewing instructions, searching existing data sources, gathering and maintaining the required data, and completing and reviewing the collection of information. Also

included are notification requirements for complying with the administrative stay.

Send comments regarding the burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to Chief, Information Policy Branch, PM-223, U.S. Environmental Protection Agency, 401 M Street., SW., Washington, DC, 20460; and to the Office of Information and Regulatory Affairs, Office of Management and Budget, Washington, DC, 20503, marked "Attention: Desk Officer for EPA." The final rule will respond to any OMB or public comments on the information collection requirements contained in this proposal.

List of Subjects

40 CFR Part 261

Hazardous materials, Waste treatment and disposal, Recycling.

40 CFR Part 264

Hazardous materials, Packaging and containers, Reporting requirements, Security measures, Surety bonds, Waste treatment and disposal.

40 CFR Part 265

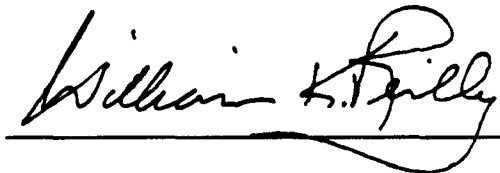
Air pollution control, Hazardous materials, Packaging and

containers, Reporting requirements, Security measures, Surety bonds, Waste treatment and disposal, Water supply.

40 CFR Part 302

Air pollution control, Chemicals, Hazardous materials transportation, Hazardous substances, Intergovernmental relations, Natural resources, Nuclear materials, Pesticides and pests, Radioactive materials, Reporting and recordkeeping requirements, Superfund, Waste treatment and disposal, Water pollution control.

Date NOV 22 1991

A handwritten signature in dark ink, appearing to read "William K. Reilly", written over a horizontal line.

William K. Reilly,
Administrator

PART 261--IDENTIFICATION AND LISTING OF HAZARDOUS WASTE

1. The authority citation for Part 261 continues to read as follows:

Authority: 42 U.S.C. 6905, 6912(a), 6921, 6922, 6934, and 6938.

2. Section 261.31 is amended by revising the F032, F034, and F035 listings. The appropriate footnotes to section 261.31 are republished without change.

§ 261.31 Hazardous wastes from non-specific sources.

*	*	*	*	*
Industry and EPA hazardous waste No.	Hazardous waste			Hazard code
<hr/>				
*	*	*	*	*
F032 ¹	Wastewaters (except those that have not come into contact with process contaminants), process residuals, preservative drippage, and spent formulations from wood preserving processes generated at plants that currently use or have previously used chlorophenolic formulations (except potentially cross- contaminated wastes that have had the F032 waste code deleted in accordance with § 261.35 of this chapter or potentially cross-contaminated wastes that are otherwise currently regulated as hazardous wastes (i.e., F034, F035, Toxicity Characteristic), and where the generator does not resume or initiate use of			(T)

chlorophenolic formulations). This listing does not include K001 bottom sediment sludge from the treatment of wastewater from wood preserving processes that use creosote and/or pentachlorophenol.

F034¹ Wastewaters (except those that have not (T)
come into contact with process
contaminants), process residuals,
preservative drippage, and spent
formulations from wood preserving processes
generated at plants that use creosote
formulations. This listing does not
include K001 bottom sediment sludge from
the treatment of wastewater from wood
preserving processes that use creosote
and/or pentachlorophenol.

F035¹ Wastewaters (except those that have not (T)
come into contact with process
contaminants), process residuals,
preservative drippage, and spent
formulations from wood preserving processes
generated at plants that use inorganic
preservatives containing arsenic or
chromium. This listing does not include
K001 bottom sediment sludge from the
treatment of wastewater from wood
preserving processes that use creosote
and/or pentachlorophenol.

* * * * *

¹The F032, F034, and F035 listings are administratively stayed with respect to the process area receiving drippage of these wastes provided persons desiring to continue operating notify EPA by August 6, 1991 of their intent to upgrade or install drip pads and by November 6, 1991 provide evidence to EPA that they have adequate financing to pay for drip pad upgrades or installation as provided in the administrative stay. The stay of the listings will remain in effect until February 6, 1992 for existing drip pads and until May 6, 1992 for new drip pads.

* * * * *

**PART 264--STANDARDS FOR OWNERS AND OPERATORS OF HAZARDOUS WASTE
TREATMENT, STORAGE, AND DISPOSAL FACILITIES**

3. The authority citation for Part 264 continues to read as follows:

Authority: 42 U.S.C. 6905, 6912(a), 6924, and 6925.

4. Section 264.570 is amended by adding paragraph (c) to read as follows:

§ 264.570 Applicability

* * * * *

(c) The requirements of this subpart are not applicable to the management of infrequent and incidental drippage in storage yards provided that:

(1) the owner or operator has a contingency plan that meets the requirements contained in the contingency plan and emergency measures of subpart D of 40 CFR part 264; and

(2) the owner or operator responds immediately to the discharge of such infrequent and incidental drippage by implementing the contingency plan and emergency measures of subpart D of 40 CFR part 264 by:

- (i) cleaning up the drippage; and
- (ii) documenting the cleanup of the drippage; and
- (iii) retaining documents regarding cleanup for three years; and
- (iv) disposing of the contaminated media as hazardous waste.

5. Section 264.571 is amended by revising paragraph (b)(1), deleting paragraph (b)(2), redesignating paragraph (b)(3) as paragraph (b)(2), and revising the new paragraph (b)(2) to read as follows:

§ 264.571 Assessment of existing drip pad integrity.

* * * * *

(b) * * *

(1) All upgrades, repairs, and modifications must be completed within 15 years of [insert effective date of this rule].

(2) If the owner or operator believes that the drip pad will continue to meet all of the requirements of § 264.573 of this subpart after the date upon which all upgrades, repairs, and

modifications must be completed as established under paragraph (b)(1) of this section, the owner or operator may petition the Regional Administrator for an extension of the deadline specified in paragraph (b)(1) of this section. The Regional Administrator will grant the petition for extension based on a finding that the drip pad meets all of the requirements of § 264.573, except those for liners and leak detection systems specified in § 264.573(b), and that it will continue to be protective of human health and the environment.

* * * * *

6. Section 264.572 is revised to read as follows:

§ 264.572 Design and installation of new drip pads

Owners and operators of new drip pads must ensure that the pads are designed, installed, and operated in accordance with all of the applicable requirements of §§ 264.573 (except 264.573(a)(4)), 264.574 and 264.575 of this subpart.

7. Section 264.573 is amended by revising paragraphs (a)(4) and (i) and adding paragraph (b)(3) to read as follows:

§ 264.573 Design and operating requirements.

(a) * * *

* * * *

(4) Have a hydraulic conductivity of less than 1×10^{-7} centimeters per second, e.g., concrete drip pads must be sealed, coated, or covered with a surface material with a hydraulic conductivity of less than 1×10^{-7} centimeters per second such that the entire surface where drippage occurs or may run across is capable of containing such drippage and mixtures of drippage and precipitation, materials, or other wastes while being routed to an associated collection system. This surface material must be maintained free of cracks and gaps that could adversely affect its hydraulic conductivity, and the material must be chemically compatible with the preservatives that contact the drip pad.

* * * *

(b) * * *

* * * *

(3) A leakage collection system immediately above the liner that is designed, constructed, maintained and operated to collect leakage from the drip pad such that it can be removed from below the drip pad. The date, time, and quantity of any leakage

collected in this system must be documented in the operating log and the leakage must be managed as hazardous waste.

* * * * *

(i) The drip pad surface must be cleaned thoroughly in a manner and frequency such that accumulated residues of hazardous waste or other materials are removed, with residues being properly disposed of as hazardous waste, so as to allow weekly inspections of the entire drip pad surface without interference or hindrance from accumulated residues of hazardous waste or other materials on the drip pad. The owner or operator must document the date and time of each cleaning and the cleaning procedure used in the facility's operating log.

* * * * *

**PART 265--INTERIM STATUS STANDARDS FOR OWNERS AND OPERATORS OF
HAZARDOUS WASTE TREATMENT, STORAGE, AND DISPOSAL FACILITIES**

8. The authority citation for Part 265 continues to read as follows:

Authority: 42 U.S.C. 6905, 6912(a), 6924, 6925, and 6935.

9. Section 265.440 is amended by adding paragraph (c) to read

as follows:

§ 265.440 Applicability

* * * * *

(c) The requirements of this subpart are not applicable to the management of infrequent and incidental drippage in storage yards provided that:

(1) the owner or operator has a contingency plan that meets the requirements contained in the contingency plan and emergency measures of subpart D of 40 CFR part 265; and

(2) the owner or operator responds immediately to the discharge of such infrequent and incidental drippage by implementing the contingency plan and emergency measures of subpart D of 40 CFR part 265 by:

(i) cleaning up the drippage; and

(ii) documenting the cleanup of the drippage; and

(iii) retaining documents regarding cleanup for three years; and

(iv) disposing of the contaminated media as hazardous waste.

10. Section 265.441 is amended by revising paragraph (b)(1),

deleting paragraph (b)(2), redesignating paragraph (b)(3) as paragraph (b)(2), and revising the new paragraph (b)(2) to read as follows:

§ 265.441 Assessment of existing drip pad integrity.

* * * * *

(b) * * *

(1) All upgrades, repairs, and modifications must be completed within 15 years of [insert effective date of this rule].

(2) If the owner or operator believes that the drip pad will continue to meet all of the requirements of § 265.443 of this subpart after the date upon which all upgrades, repairs, and modifications must be completed as established under paragraph (b)(1) of this section, the owner or operator may petition the Regional Administrator for an extension of the deadline specified in paragraph (b)(1) of this section. The Regional Administrator will grant the petition for extension based on a finding that the drip pad meets all of the requirements of § 265.443, except those for liners and leak detection systems specified in § 265.443(b), and that it will continue to be protective of human health and the environment.

* * * * *

11. Section 265.442 is revised to read as follows:

§ 265.442 Design and installation of new drip pads

Owners and operators of new drip pads must ensure that the pads are designed, installed, and operated in accordance with all of the applicable requirements of §§ 265.443 (except 265.443(a)(4)), 265.444 and 265.445 of this subpart.

12. Section 265.443 is amended by revising paragraphs (a)(4) and (i) and adding paragraph (b)(3) to read as follows:

§ 265.443 Design and operating requirements.

(a) * * *

* * * *

(4) have a hydraulic conductivity of less than 1×10^{-7} centimeters per second, e.g., concrete drip pads must be sealed, coated, or covered with a surface material with a hydraulic conductivity of less than 1×10^{-7} centimeters per second such that the entire surface where drippage occurs or may run across is capable of containing such drippage and mixtures of drippage

and precipitation, materials, or other wastes while being routed to an associated collection system. This surface material must be maintained free of cracks and gaps that could adversely affect its hydraulic conductivity, and the material must be chemically compatible with the preservatives that contact the drip pad.

* * * * *

(b) * * *

* * * * *

(3) A leakage collection system immediately above the liner that is designed, constructed, maintained and operated to collect leakage from the drip pad such that it can be removed from below the drip pad. The date, time, and quantity of any leakage collected in this system must be documented in the operating log and the leakage must be managed as hazardous waste.

* * * * *

(i) The drip pad surface must be cleaned thoroughly in a manner and frequency such that accumulated residues of hazardous waste or other materials are removed, with residues being properly disposed of as hazardous waste, so as to allow weekly inspections of the entire drip pad surface without interference or hindrance from accumulated residues of hazardous waste or

other materials on the drip pad. The owner or operator must document the date and time of each cleaning and the cleaning procedure used in the facility's operating log.

* * * * *

PART 302--DESIGNATION, REPORTABLE QUANTITIES, AND NOTIFICATION

11. The authority citation for part 302 continues to read as follows:

Authority: 42 U.S.C. 9602; 33 U.S.C. 1321 and 1361.

12. Section 302.4(a) is amended by revising the listings for waste streams F032, F034, and F035 in Table 302.4. The appropriate footnotes to Table 302.4 are republished without change.

§302.4 Designation of hazardous substances.

(a) * * *

TABLE 302.4 - LIST OF HAZARDOUS SUBSTANCES AND REPORTABLE QUANTITIES

HAZARDOUS SUBSTANCE	CASRN	REGULATORY SYNONYMS	STATUTORY			PROPOSED RQ	
			RQ	CODE †	RCRA WASTE NUMBER	CATEGORY	POUNDS (Kg)
F032 Wastewaters (except those that have not come into contact with process contaminants), process residuals, preservative drippage, and spent formulations from wood preserving processes generated at plants that currently use or have previously used chlorophenolic formulations (except potentially cross-contaminated wastes that have had the F032 waste code deleted in accordance with § 261.35 of this chapter or potentially cross-contaminated wastes that are otherwise currently regulated as hazardous wastes (i.e., F034, F035, Toxicity Characteristic), and where the generator does not resume or initiate use of chlorophenolic formulations). This listing does not include K001 bottom sediment sludge from the treatment of wastewater from wood preserving processes that use creosote and/or pentachlorophenol.	1*	4	F032	X	1(0.454)
F034 Wastewaters (except those that have not come into contact with process contaminants), process residuals, preservative drippage, and spent formulations from wood preserving processes generated at plants that use creosote formulations. This listing does not include K001 bottom sediment sludge from the treatment of wastewater from wood preserving processes that use creosote and/or pentachlorophenol.	1*	4	F034	X	1(0.454)

† Indicates the statutory source as defined by 1, 2, 3, 4, or 5 below.

4 Indicates that the statutory source for designation of this hazardous substance under CERCLA is RCRA Section 3001.

1' Indicates that the 1-pound RQ is a CERCLA statutory RQ.

TABLE 302.4 - LIST OF HAZARDOUS SUBSTANCES AND REPORTABLE QUANTITIES (cont.)

HAZARDOUS SUBSTANCE	CASRN	REGULATORY SYNONYMS	STATUTORY			PROPOSED RQ	
			RQ	CODE †	RCRA WASTE NUMBER	CATEGORY	POUNDS (Kg)
F035 Wastewaters (except those that have not come into contact with process contaminants), process residuals, preservative drippage, and spent formulations from wood preserving processes generated at plants that use inorganic preservatives containing arsenic or chromium. This listing does not include K001 bottom sediment sludge from the treatment of wastewater from wood preserving processes that use creosote and/or pentachlorophenol. * *			1*	4	F035	X	1(0.454)

† Indicates the statutory source as defined by 1, 2, 3, 4, or 5 below.

4 Indicates that the statutory source for designation of this hazardous substance under CERCLA is RCRA Section 3001.

1' Indicates that the 1-pound RQ is a CERCLA statutory RQ.

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